



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/562,829	12/29/2005	Shinji Ishida	012774-005	6473
21839 7590 01/13/2010 BUCHANAN, INGERSOLL & ROONEY PC POST OFFICE BOX 1404 ALEXANDRIA, VA 22313-1404				
EXAMINER OSINSKI, BRADLEY JAMES				
ART UNIT		PAPER NUMBER		
3767				
NOTIFICATION DATE		DELIVERY MODE		
01/13/2010		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ADIPFDD@bipc.com

# Office Action Summary

**Application No.**

10/562,829

**Applicant(s)**

ISHIDA ET AL.

**Examiner**

BRADLEY J. OSINSKI

**Art Unit**

3767

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 October 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 8-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 8-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/CD)  
Paper No(s)/Mail Date 9/30/2009
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 8-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Spencer (4,619,642) in view of Babyak (Appliance Manufacturer), Spencer '971 (4,516,971) and Holstein (1,477,265).

a. Regarding claim 8, Spencer discloses a tube clamp apparatus with a placement clamp section 183/184, a movable clamp section 185/186 that pressed down on the tube placed in the placement clamp section 185/186, and a hood section 185d/186d at the movable clamp section to engage the engagement members 183d/184d of the elastic member the placement clamp section to maintain a pressing state upon a tube. Hooks 185d/186d are orthogonal to tubes placed in the placement clamp sections (183a/183b/184a/184b). Further disclosed by Spencer is a cutting unit 99 and a movement unit to move the two holding units 180/182 relative to each other such that the end portions to be connected face each other. (Figures 2-4 and 7)

While Spencer substantially discloses the apparatus as claimed, it does not disclose the hood section having a plurality of divided hook portions in a direction orthogonal to a longitudinal direction of a tube placed in the device with

one of the portions being elastic nor does it disclose the holding unit having two different sections one with a shaft and the other with a receiving hole for the shaft.

However, Babyak discloses fastening systems and specifically discloses a urethane elastomer between metal fasteners to create a sandwich mount to provide shock protection, vibration isolation and noise control. Holstein discloses a window latch/lock that uses friction to assist in creating a lock. Metal parts of the lock 11 sandwich an elastic member F between them. The elastic member is protruded on one side (that contacts the window pane) and both metal sides 11 and elastic member 11 are arranged in an orthogonal direction to the device it is meant to secure (window pane C). Placing the urethane (of Babyak) or rubber (of Holstein) in such a relation, causes the elastic members to have both sides fixed to the metal section and another side protruding with respect to some of the other hook portions. While Holstein is a different shape, the frictional forces it creates are applicable to different shapes, including hook shape of Spencer.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the hooks of Spencer by sandwiching urethane or rubber in the shape of a hook, but protruding on the side that contacts the device between two metal hooks as taught by Babyak and Holstein as such is a known method of forming a fastener (such as in Holstein) and would provide shock protection, vibration isolation and noise control (such as in Babyak).

Spencer '971 discloses another holding system having two parts 17/18 with shaft 36 and hole 35. The shaft and hole are used to keep the mounting blocks in a cooperative relationship (Col.5 lines 60-63). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to add a shaft and hole to each holding section of Spencer as taught by Spencer '971 in order to keep the blocks in a cooperative relationship.

- b. Regarding claim 9, Two holding units 180/182 are disposed along a longitudinal direction of the tubes and the cutting occurs between holding units 180/182.
  - c. Regarding claim 10, See arrows in figure 7, the movement unit moves holding unit 180 both longitudinally and orthogonally to the tubes.
  - d. Regarding claim 11, See claim 2 above.
  - e. Regarding claim 12, See claim 4 above.
  - f. Regarding claim 13, see Hostein, the bracket D is made of sheet metal (line 26) and the block F is made of rubber (lines 59 and 60) both of which are parallel to each other (figure 2).
2. Claims 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Spencer (4,619,642), Holstein (1,477,265) and Babyak (Appliance manufacturer) as applied to claim 1 above, and further in view of Smith et al (Mechanical Engineering).
- g. Regarding claim 14, While Spencer and Babyak substantially discloses the apparatus as claimed such as engagement members 183d/184d, they do not disclose the engagement member being made of a resin. However, Smith et al

discloses advantages of plastics over metals with regards to mechanical interactions. Specifically plastic gears are lighter, less costly and do not wear as much as metals. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to make the engagement member of Spencer of a plastic resin as discussed in Smith et al to decrease costs, weight and wear of the device.

h. Regarding claim 15, Spencer discloses rotatable rollers 183d/184d on which the elastic member as discussed in claim 1 above slides along the circumference to maintain engagement with the roller.

### ***Response to Arguments***

3. Applicant's argument that the Examiner did not address a limitation nor is such a limitation taught by the art of record is persuasive. After reconsidering the application, a new rejection is made above.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BRADLEY J. OSINSKI whose telephone number is (571)270-3640. The examiner can normally be reached on M-Th 8AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Simons can be reached on (571)272-4965. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Bradley J Osinski/  
Examiner, Art Unit 3767  
/Nicholas D Lucchesi/  
Supervisory Patent Examiner, Art Unit 3763